

Consideration of Environmental Factors

In recent years, environmental considerations associated with highway improvements or construction have come to the forefront of the planning process. The legislation that dictates the necessary procedures regarding environmental impacts is the National Environmental Policy Act of 1969. Section 102 requires the development of a detailed statement on the environmental impact of any proposed action, including evaluation of alternatives and documentation of any unavoidable adverse effects. The North Carolina Department of Transportation develops environmental impact statements (EIS) for roadway projects that have a significant impact on the environment and less detailed statements, such as categorical exclusions and environmental assessments, for other projects. Typical environmental analysis involves evaluation of a project's impact on wetlands, water quality, historic properties, wildlife, and public lands.

This technical report for the Pink Hill thoroughfare plan is not intended to cover environmental concerns in as much detail as an EIS. However, preliminary research on environmental factors is generally done at the thoroughfare planning stage in order to select the appropriate corridor for proposed improvements. For the major new location projects proposed as part of the Pink Hill Thoroughfare Plan, TIP Projects R-2001 and R-2204, environmental assessments have been completed by NCDOT's Project Development and Environmental Analysis Branch. Therefore, since the environmental factors described below have been reviewed as part of the development of the environmental assessment, it is unnecessary to conduct a separate review as part of this thoroughfare plan study. Figure 12 shows general environmental information for the Pink Hill planning area.

Wetlands

In general terms, wetlands are areas where saturation with water is the dominant factor in determining the nature of soil development and the types of plant and animal communities living in the soil and on its surface. The single characteristic that most wetlands share is soil or substrata that is at least periodically saturated with or covered by water. Unique species inhabit wetlands since water creates severe physiological problems for all plants and animals except those that are adapted for life in water or in saturated soil.

Wetlands are crucial ecosystems in our environment. They help regulate and maintain the hydrology of our rivers, lakes, and streams by slowly storing and releasing floodwaters. They help maintain the quality of our water by storing nutrients, reducing sediment loads, and reducing erosion. They are also critical to fish and wildlife populations. Wetlands provide an important habitat for about one third of the plant and animal species that are federally listed as threatened or endangered.

The impacts to wetlands can be evaluated using the National Wetlands Inventory Mapping, available from the U. S. Fish and Wildlife Service. Wetland impacts are to be avoided or minimized to the greatest extent possible, while preserving the integrity of the thoroughfare plan.

Threatened and Endangered Species

A review of Federally Listed Threatened and Endangered Species is done to determine the effect new corridors or widened roadways could have on wildlife. Threatened or endangered species are identified using mapping from the North Carolina Department of Environment, Health, and Natural Resources.